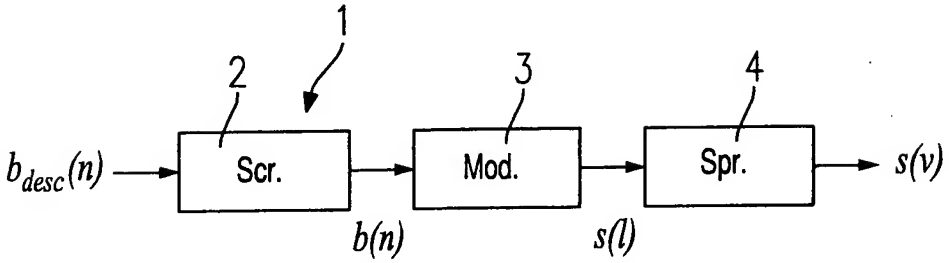


Fig. 1

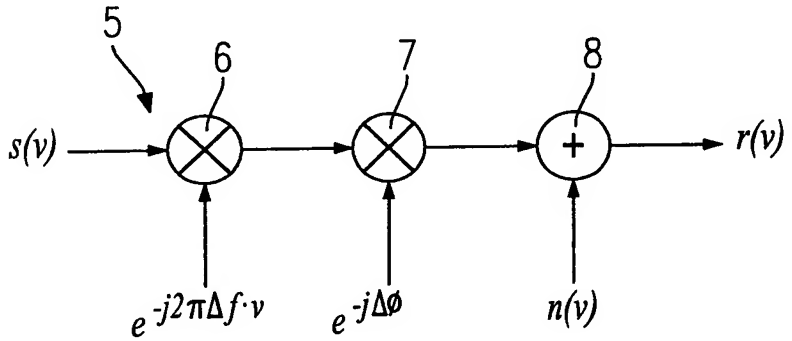


Fig. 2

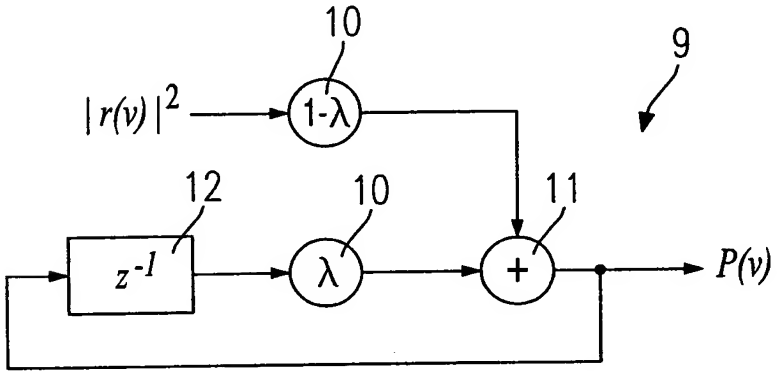
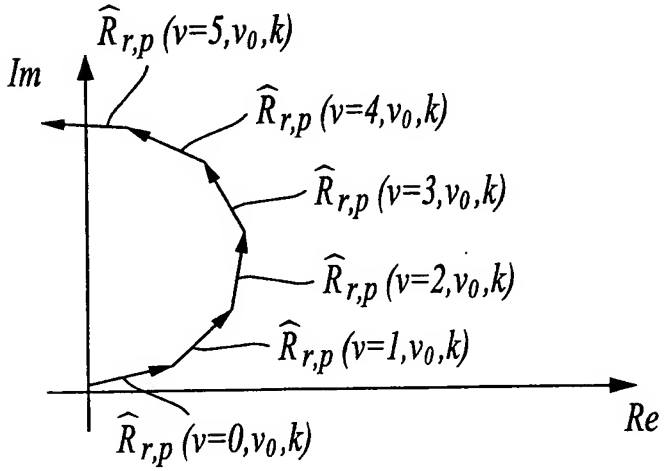


Fig. 3

Fig. 5



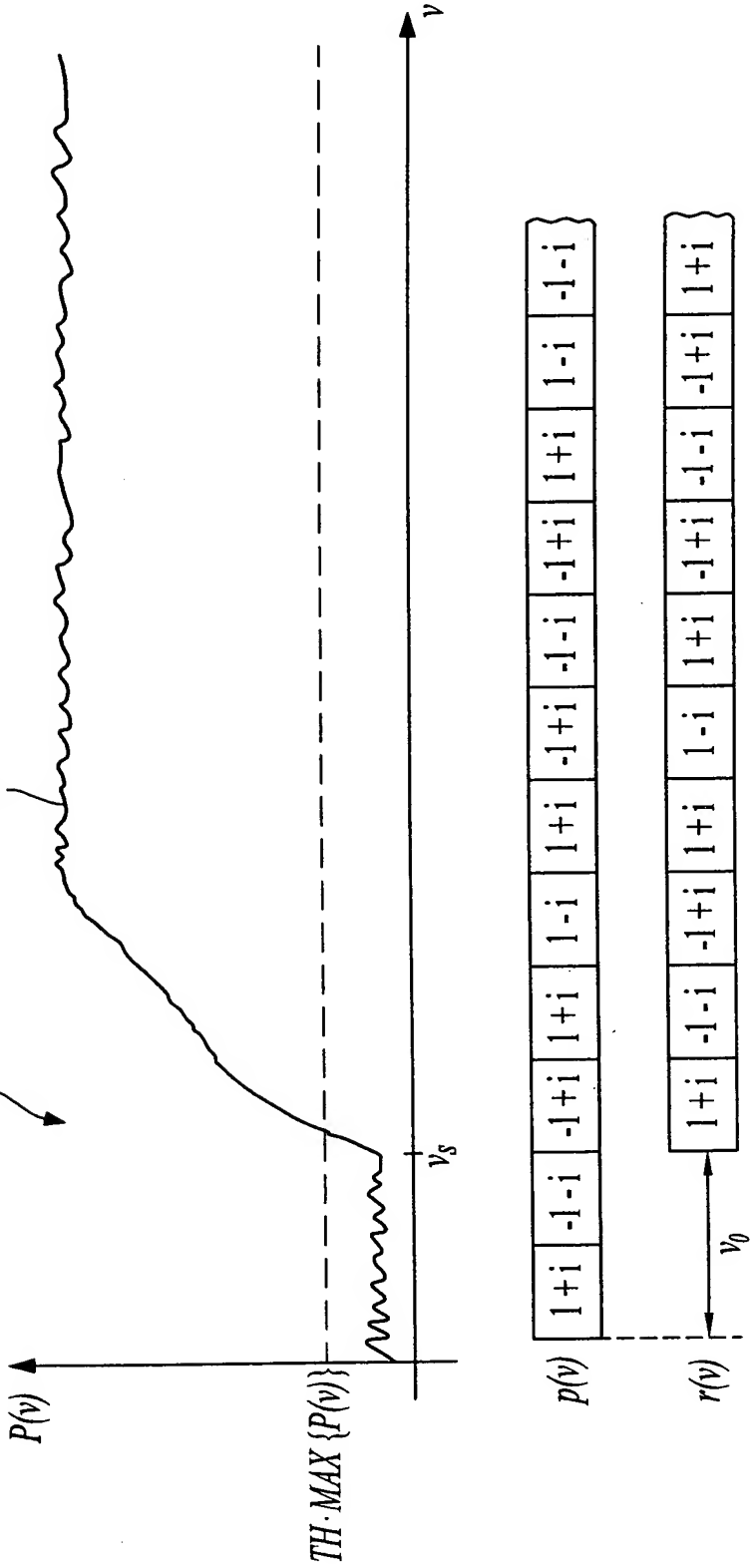

BS
BB
P(v)
TH·MAX {P(v)}
v
v_s
v_0
p(v)
r(v)
1+i -1-i -1+i 1+i 1-i 1+i -1+i -1-i -1+i 1+i 1-i 1+i -1+i -1-i -1+i 1+i
1+i -1-i -1+i 1+i 1-i 1+i -1+i -1-i -1+i 1+i 1-i 1+i -1+i -1-i -1+i 1+i

Fig. 4

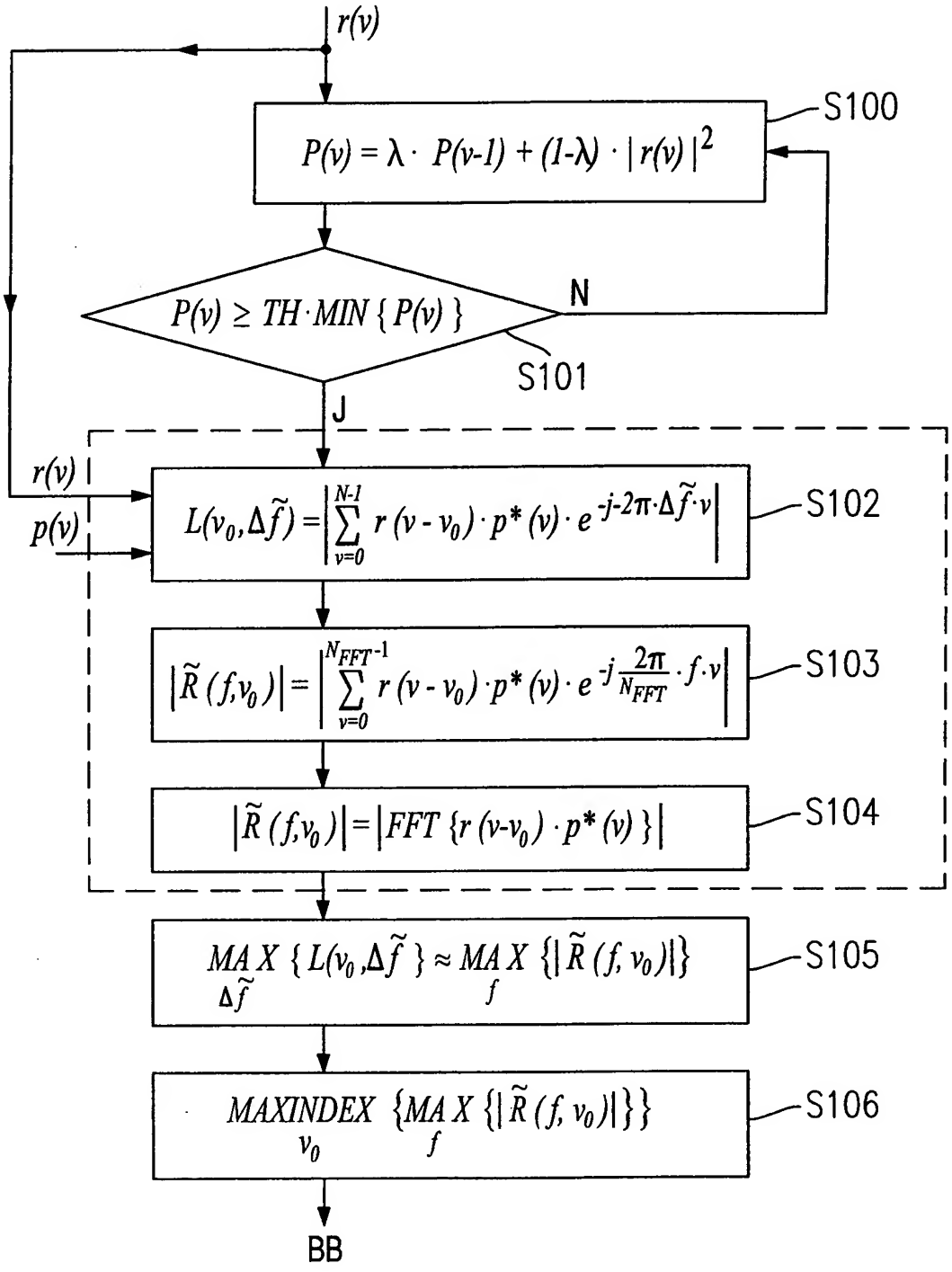

r(v)
P(v) = λ · P(v-1) + (1-λ) · |r(v)|²
S100
P(v) ≥ TH·MIN {P(v)}
N
S101
J
r(v)
p(v)
L(v0, Δf̃) = |Σ_{v=0}^{N-1} r(v - v0) · p*(v) · e^{-j-2π·Δf̃·v}|
S102
|R̃(f, v0)| = |Σ_{v=0}^{NFFT-1} r(v - v0) · p*(v) · e^{-j 2π/NFFT · f·v}|
S103
|R̃(f, v0)| = |FFT {r(v-v0) · p*(v)}|
S104
MAX_{Δf̃} {L(v0, Δf̃)} ≈ MAX_f {|R̃(f, v0)|}
S105
MAXINDEX_{v0} {MAX_f {|R̃(f, v0)|}}
S106
BB

Fig. 6